

Akron Engineering Bureau

2002 Annual Report



City of Akron Department of Public Service

Donald L. Plusquellic
Mayor

Joseph P. Kidder
Service Director

David J. Celik
City Engineer

Vision

City Engineer

Design Division

Environmental Division

Construction Division

Administrative Services

Revenue/Expenditures

To: Customers

From: David J. Celik, P.E.
City Engineer



Re: Akron Engineering Bureau, 2002

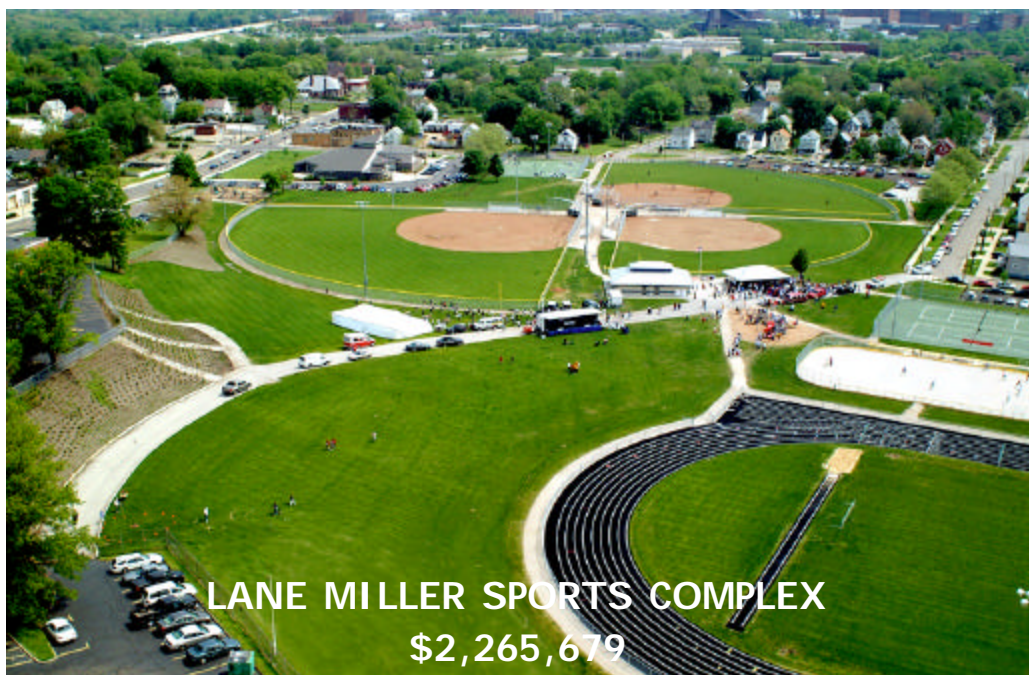
Enclosed for your review and consideration is the 2002 Akron Engineering Bureau Annual Report.

2002 was highlighted by significant activity in design and construction of several major projects, including the High-Main Parking Deck to serve the new Main Library and commercial development in the downtown historic district, Mud Run Golf Course, Lock 3 and demolition of the Broadway Street Viaduct and construction of the new roadway. In total, we bid \$42.6 million in construction contracts and paid out \$46.1 million in construction contract billings.

We achieved significant progress on our goals. Most notably, in workplace flexibility and cross-training of our employees. In addition, we were able to create five new Engineering Technician III positions which provided for promotions for our employees.

Our participation in the World Class Organization (WCO) initiative continued last year. The primary activities included formation of the E3 Core Design Team. The Engineering Bureau is also represented on the Leading Change Team.

The Engineering Bureau is prepared to meet the new challenges in 2003.



LANE MILLER SPORTS COMPLEX

\$2,265,679

AEB VISION



Akron Engineering Bureau (AEB) Vision 2002

Our vision is to provide professional engineering services that meet the infrastructure needs of our customers by:

Planning projects that meet the goals of the City.

Designing projects in a cost effective manner.

Constructing projects in compliance with the contract documents.

To reach this vision means:

Utilizing the experience, education and training of our employees to create a more flexible work force.

Empowering our employees to manage projects more independently.

Use of innovative plan development, design and construction techniques to minimize project costs.

Maintaining the highest level of ethics and professionalism.

Long Term Vision Affirmation

We will affirm and re-enforce our vision by operating the AEB with the following philosophy:

Reduce the need for supervision by creating additional Engineering Technician III and Civil Engineer III promotional opportunities, and filling those positions with capable and motivated employees who can independently coordinate all aspects of a project.

Assign employees based on:

- The overall needs of the AEB.
- The experience level necessary to administer the specific project.
- The opportunity to diversify the experience of the workforce.
- The expectation of minimizing project costs.

Rotate employees between the Design/Environmental Division and the Construction Division so that all employees become proficient in both project design and construction administration.

Maintain the proper balance between in-house design and consultant design.

Determine and monitor overhead rates including project development and programming costs in order to fully understand the cost-effectiveness of the AEB.

Administrative Services

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Construction Division

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weberji@ci.akron.oh.us



City Engineer

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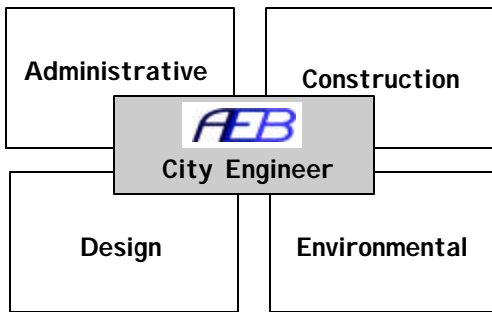
Design Division

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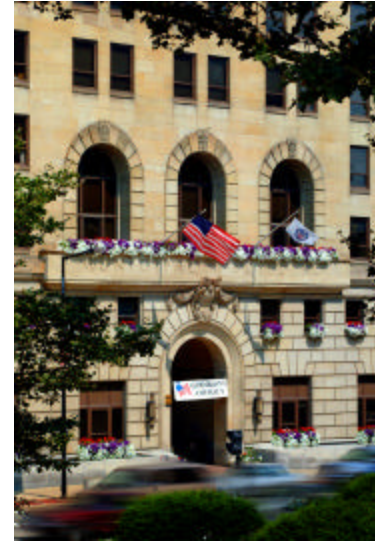
Environmental Division

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gsellpa@ci.akron.oh.us





City Engineer



Core Functions

The Akron Engineering Bureau (AEB) is responsible for the planning, design and construction of the public improvement projects of the City of Akron. Our goal is to produce high quality projects on schedule and within budget. In 2002, the Akron Engineering Bureau bid over \$42.6 million worth of public improvement projects. The Bureau also paid out over \$46.1 million in construction payments during the year. The types of projects include: street and sidewalk reconstruction, bridge maintenance and reconstruction; parks, playgrounds and athletic fields; building construction and rehabilitation; public utilities (water, storm and sanitary sewer system improvements).

AEB employees maintain cooperative working relationships with the public, City Council, the Administration, other City divisions, consulting engineering firms, utility company representatives, contractors, developers, suppliers and federal, state and municipal agencies. While accomplishing our mission, the highest level of ethics and professionalism is maintained.

The Engineering Bureau continued its active participation in the World Class Organization (WCO) initiative in 2002. The Engineering Bureau is a member of the Leading Change Team and the E³ Core Design Team.

The E3 Core Design Team includes representatives from the Engineering Bureau, Public Works Engineering Services and Traffic Engineering. The Team vision is to provide quality services that are delivered efficiently and effectively. The Team process includes an eight step process. During 2002 the Team worked through the first 5 steps. They included (1) identify products and services, (2) define customers and requirements, (3) develop strategic objectives, (4) redesign process and define standards and define organization structure and identify resources. The Action Plan is scheduled to be completed in 2003.

2002 Goals

Reduced our in-house costs by increasing flexibility of employees working for multiple divisions.

Created five additional Engineering Technician III positions.

Completed the 2002 project manpower projections.

Developed a reporting system to accurately show project costs that can be used by the AEB to analyze project costs.

Assigned seventeen Engineering Technicians to the Construction Division from the Design and Environmental Divisions for the construction season.

Assigned six Engineering Technicians to the Design or Environmental Divisions for the winter season.

Assigned two Civil Engineers to the Construction Division from the Design and Environmental Divisions to be Resident Project Representatives in an effort to reduce construction administration costs and develop design skills.

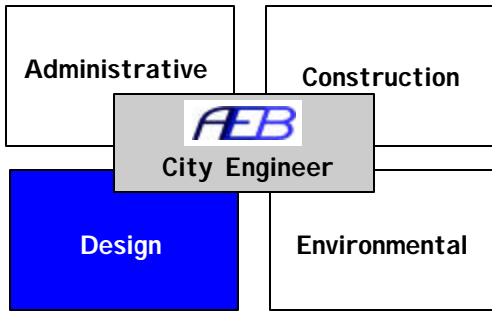


Service Levels

In 2002 the Engineering Bureau processed 853 contractor and consulting invoices totaling \$46.1 million.

The Engineering Bureau bid and administered 57 construction contracts with 31 different contractors for a total of over \$42.6 million in 2002.

The Engineering Bureau attended 24 public meetings to inform the public about City projects and procedures.



Design Division



Core Functions

Programming/Budgeting
 Detail Design
 Project Management
 Public Involvement
 Transportation Program
 Consultant Contract Administration
 Standards and Specifications
 Plan Review
 Surveying
 Mapping

Subdivision and Plan Review



Jim Anderson Wayne Bachus Travis Capper Jeff Caston Andrew Davis Rick Falkenstein
 Fred Fassnacht Rick Fischer Bob Geiser Jason Harris Dennis Hawthorne Tish Jernigan
 Christine Jonke Randy Keirns Leah Lee Mike Madonio Bill Magyar Bill Marras Beth Mettle Jeff Miller
 Corey Moke Mark Moore Barry Pruitt Dianne Reed Jody Richards Phil Rohr Chad Root Rob Scarlatelli
 Adam Staller Sanford Taylor Michael Teodecki Don Vardon Jim Vechery David Wilkerson Jason Zajac

2002 Goals

Revised the Sidewalk Inspection Manual to meet ADA regulations. Anticipate a revised City Ordinance to be passed in 2003 before issuing the new manual.

Revised and updated the Programming and Legislation sections of the Design Manual. Sections including Estimating, Assessments and QA/QC continue to be developed.

Developed the Design Division staff by promoting training programs for specific design-related issues such as sidewalk surveys, network drive awareness, curb ramps on steep slopes, and other design-related issues.

Major Accomplishments

Completed plans for the replacement of the Broadway Street viaduct with an at-grade roadway.

Completed the Design/Build plans for the High-Market Parking Deck. The deck will provide 600+ parking spaces and will complement the renovation of the Akron-Summit County Public Library.

Completed plans for a public golf course at Mud Run Park. The course includes nine holes, a driving range, clubhouse and other amenities.

Completed plans for the Memorial Parkway Leaf Dump Closure.

Completed plans for the petitioned full street improvements on Cooledge Avenue, Alaho Street, Black Street, Seward Avenue, Torrey Street, and Woodward Avenue.

Prepared a contract for the installation of new curb ramps that included Canton Road from the south corp line to Interstate 76 in anticipation of an ODOT resurfacing project in 2003.

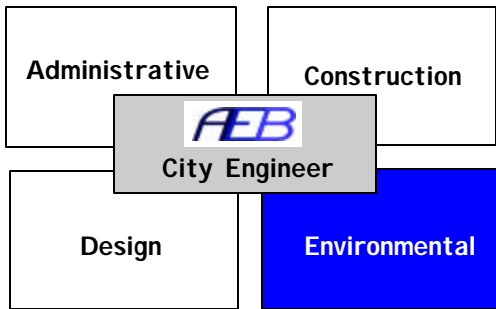
Completed plans for a parking lot to serve the Cuyahoga Valley Rail Station on Ridge Street. The lot provides 110+ parking spaces. Landscaping and lighting was also provided.

Training

Sidewalk Surveys/Tree Grate
Standard Drawing
ADA Standard Drawing Updates
Global Schedules
Street Signs
Network Drive Awareness
Capital Request Forms
Spec Book Updates/Survey GPS System
Curb Ramps on Steep Slopes
Plans & Permits Review Process
AutoCAD
Plotting with AutoCAD
Project Programming
Legislation Process
Construction Material Seminars
Excel 97 PC Training
Presentations using PowerPoint
Environmental & Transportation

Development Process
Grammar/proofreading
Supervisory training
RPR training
Prof. Land Surveyors Conference
ODOT training
Perpetual pavement on I-77
Micro Indoor Environments Seminar
Maintenance & Repair of Buildings
Primavera Project Management
LPA Local Let Policy & Procedures
FPS Technical Seminars: Detention Basins, Phase II Permits, Extending Pavement Life, GIS applications
Survey Training Class at Imaginit
ODOT Engineering Conference





Environmental Division



Core Functions

Detailed Design
 Project Management
 Developer Assistance, Coordination
 and Plan Review
 Storm Water Management
 Sanitary Sewer Evaluation Studies
 Water Pollution Control Station
 Hardy Road Landfill
 Joint Economic Development Dis-
 tricts (JEDD)
 Slope Stability/Erosion Control
 Brownfields

Facilities Planning
 Combined Sewer Overflows (CSO)



Genny Barth Len Blankenship Chris Bores Jeff Bronowski Michelle DiFiore Patrick Gsellman
 Kurt Heffernan Mark Pirie Jeff VanNatten

2002 Goals

An initial assessment of GIS needs was completed. The draft report was available in 2003.

Participated in Divisional employee transfers within the Akron Engineering Bureau. Two Environmental employees were assigned to the Construction Division, and a Construction Division Project Coordinator was assigned an Environmental project. Additionally, an Environmental employee was assigned to work with the Administrative Services on the underground mapping update.

Training was received on pump station design and storm water. Training materials were received on FEMA, wetlands and water modeling.

The City of Akron became actively involved in the TMDL process for the Cuyahoga River by in 2002.

CSO Long Term Control Plan (LTCP) development continued; a tentative agreement was reached with the Ohio EPA in June. Follow-up meetings were held with the USEPA in September.

Major Accomplishments

An emergency design/construction contract was completed for the utilities, grading, storm water and site preparation for the Phase III of the Ascot Industrial Park to allow for the construction of the Coltene-Whaledent Facility.

Despite challenges of wetlands and ODOT the design/construction contract was completed for the utilities, grading, storm water, site preparation and intersection improvements at Massillon Rd the Massillon Rd Industrial Park allow for the construction of the AESCO Facility.

Clean Ohio Funds were received for the demolition of the Beech Street Steam Plant and the Fairlawn CC Stream Protection project.

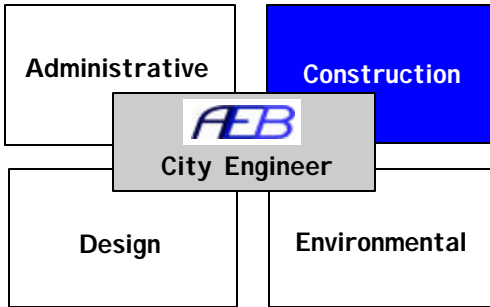
The Army Corps of Engineers 404 wetlands permit was received for the Massillon Rd Industrial Park and the Pickle Rd. Sports Field Projects.

A GIS assessment study was initiated in 2002 in order to begin determining the future needs of maintaining underground records, CSR and 311 systems.

Training

CADD Training w/ Survey Module	land Preservation	Ohio Water and Sewer Seminar
Network Drive	Clean-Ohio Application Workshop	WEFTEC 2003
Awareness	Storm water conference	Section Meeting, tour of Southerly WWTP (OWEA)
Tunnel Tour	Wooster Expo	OWEA Section Meeting and tour of Canton WWTP
Construction Material Seminars	Pump station design (ASCE)	Environmental law update
WCO Presentations	Step up to Leadership	WEF Washington Briefing
GIS application seminar (ASCE)	OWEA Annual Conference	
Government Affairs Conference	ASCE Pipeline 2002 Conference	
Zone II Leadership Conference	Ditch Witch of	
Clean-Ohio Farm-		





Construction Division



Core Functions

Construction Project Administration
Plan Review
Materials Testing Laboratory
Bridge Inspection and Inventory
Public Involvement



VEGETATIVE EXPRESSWAY
LANDSCAPING — PHASE I

Juan Pablo Ascarrunz Brad Beckert Mike Brehob Dave Cooke T. Scott Davenport Karen Dyer
Rick Falkenstein Bill Hahn Jim Hall Jim Hewitt Mike Huber Kerry Jones Jason Kline Chad Kobelt
Richard Kovach Paul McCutcheon Larry Peaslee Chad Root Bill Stump Mike Watt Jim Weber
Mike Wytrzyaszczewski

2002 Goals

Continued the development of a continuing education program for Resident Project Representatives with three additional areas of construction (Architectural projects, Earthwork and Landscaping).

Conducted an Asphalt Paving seminar.

Conducted the Resident Project Representative Seminar.

Continued to monitor Gypsy Moth infestation and work with the Ohio Department of Agriculture.

Major Accomplishments

Massillon Rd Industrial Park Infrastructure
\$1,579,937

Northside Rail Station Parking — Completed
\$354,008

Vegetative Expressway Landscaping Phase I
\$609,871

Vaughn Road Ball Fields Building — Constructed
\$318,454

Vaughn Road Ball Fields/Logan Field — Constructed
\$345,724

Memorial Parkway Leaf Dump Closure — Completed
\$674,932

Lane Miller Sports Complex — Completed
\$2,265,679

Planted 873 replacement trees on street improvement projects.

Received the Tree City Award.

Successfully secured Enhancement Funds and completed the Vegetative Expressway Landscaping Project.

Flowered window boxes debuted and adorned City Hall from May to October.

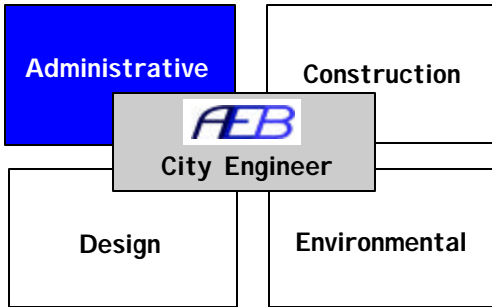


Training

AutoCADD
RPR Seminar
Coordinate your own project
Concrete

Emergency preparedness
Business writing
World of Concrete
Asphalt paving

Design-Build
Earthwork Seminar
Landscaping Seminar
Architectural Projects

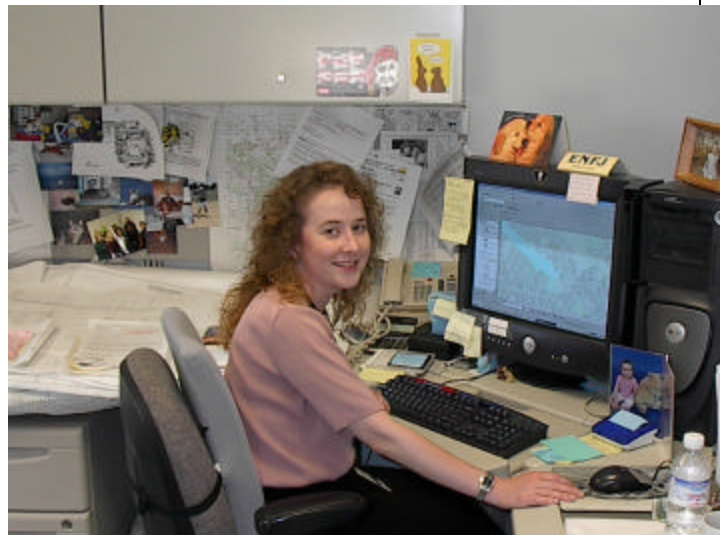


Administrative Services Division



Core Functions

Legislation
 Contract Preparation
 Street Improvement Petitions
 Street Dedication Petitions
 Private Development Agreements
 Underground Records
 Central Records Files
 Service Counter
 Secretarial Staff
 Computer Mapping/GI S
 Resolving Legal Claims
 Computer Hardware Support
 Computer Software Support



Wendy Doyle Linda Fallon Alicia Garnett Colleen Gaynor Chuck Hirsch Brent Kelley Kenneth Kostura
 Marianne Kracker Pam Pollock Joe Prekop Larry Thomas Patty Trudics

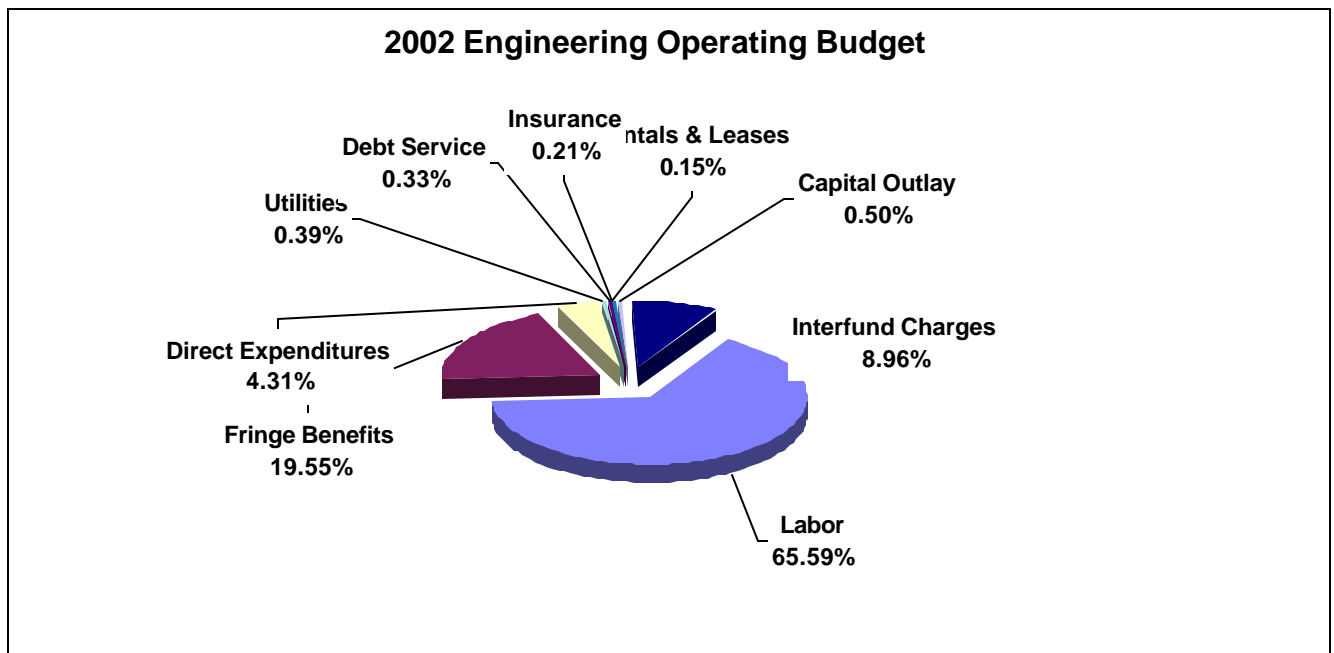
2002 Goals

Reduced document retrieval costs and thereby reduced project overhead cost by archiving scanned images of project correspondence files as they reach 'final' status. Electronic storage makes the documents easier to find. After researching software solutions, a low-tech approach was selected. File preparation procedures were finalized at the end of the year and monthly scanning of files began after the first of the year, in 2003.

In order to make the estimating process faster and more efficient, a committee representing all of the Engineering Bureau divisions evaluated the development of a bid tabulation database. The committee identified the system requirements that will guide the selection of software.

Identified a list of major tasks and trained a back-up person for each task. The overall list of tasks was updated to accommodate a new employee and some re-assignment of duties.

2002 Budget



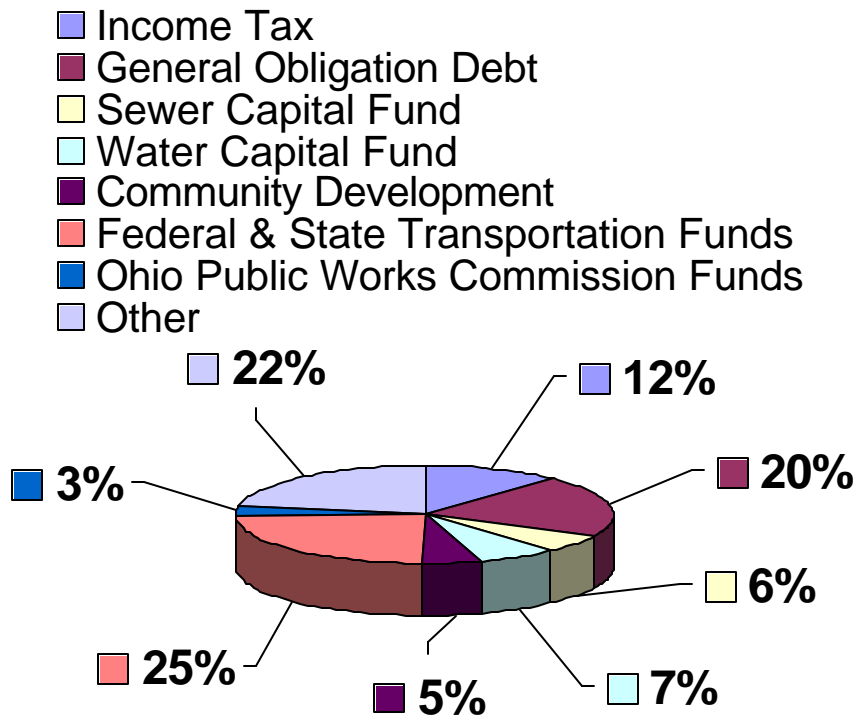
Training

Excel 97 PC Training
Network Drive Awareness
Banner and Webfocus Training
EAP Organizational Influence
CSR Training
Scanning with Alchemy
Visual Basic 6.0
Visual Basic for Excel Applications

ODOT LPA Project Administration
FPS Engineering Seminar



2002 Sources of Revenue



2002 Program Expenditures

